

Table A-3. Total (Federal plus company and other) funds for industrial R&D performance in the U.S.,
by industry and size of company: 1999-2001

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Industry and size of company	NAICS codes	1999 ¹	2000	2001 ²
		Millions of dollars		
Distribution by industry:				
All industries	21-23, 31-33, 42, 44-81	182,711	199,539	198,505
Manufacturing	31-33	116,921	124,078	120,705
Food	311	1,132	(D)	1,819
Beverage and tobacco products	312	(D)	417	152
Textiles, apparel, and leather	313-16	334	(D)	(D)
Wood products	321	70	105	182
Paper, printing and support activities	322, 323	(D)	(D)	(D)
Petroleum and coal products	324	615	(D)	(D)
Chemicals	325	20,246	20,918	17,892
Basic chemicals	3251	2,746	2,080	1,876
Resin, synthetic rubber, fibers, and filament	3252	(D)	2,852	(D)
Pharmaceuticals and medicines	3254	(D)	(D)	10,137
Other chemicals	325 minus (3251-52, 3254)	(D)	(D)	(D)
Plastics and rubber products	326	1,785	(D)	(D)
Nonmetallic mineral products	327	(D)	846	990
Primary metals	331	470	624	485
Fabricated metal products	332	1,655	1,672	1,599
Machinery	333	6,057	6,580	6,404
Computer and electronic products	334	35,932	45,097	47,079
Computers and peripheral equipment	3341	(D)	5,162	(D)
Communications equipment	3342	6,003	11,616	15,507
Semiconductor and other electronic components	3344	10,701	12,894	14,358
Navigational, measuring, electromedical, and control instruments	3345	14,337	15,116	12,947
Other computer and electronic products	334 minus (3341-42, 3344-45)	(D)	310	(D)
Electrical equipment, appliances, and components	335	(D)	(D)	4,980
Transportation equipment	336	33,965	30,085	25,965
Motor vehicles, trailers, and parts	3361-63	(D)	(D)	(D)
Aerospace products and parts	3364	14,425	10,319	7,868
Other transportation equipment	336 minus (3361-64)	(D)	(D)	(D)
Furniture and related products	337	248	284	301
Miscellaneous manufacturing	339	3,851	4,206	6,606
Medical equipment and supplies	3391	(D)	(D)	(D)
Other miscellaneous manufacturing	339 minus (3391)	(D)	(D)	(D)
Other manufacturing	31-33 minus (311-16, 321-27, 331-37, 339)	--	--	--

See explanatory information and SOURCE at end of table.

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Industry and size of company	NAICS codes	1999 ¹	2000	2001 ²
		Millions of dollars		
Distribution by industry:				
Nonmanufacturing	21-23, 42, 44-81	65,790	75,461	77,799
Mining, extraction, and support activities	21	(D)	823	(D)
Utilities	22	142	(D)	133
Construction	23	691	(D)	320
Trade	42, 44, 45	19,616	24,959	24,372
Transportation and warehousing	48, 49	460	(D)	1,848
Information	51	15,389	16,830	(D)
Publishing	511	11,302	13,004	13,760
Newspaper, periodical, book, and database	5111	371	365	649
Software	5112	10,931	12,639	13,111
Broadcasting and telecommunications	513	(D)	1,407 (S)	(D)
Radio and television broadcasting	5131	(D)	(D)	(D)
Telecommunications	5133	(D)	(D)	(D)
Other broadcasting and telecommunications	513 minus (5131, 5133)	31	59	(D)
Other information	51 minus (511, 513)	(D)	2,420	(D)
Finance, insurance, and real estate	52, 53	(D)	4,025	(D)
Professional, scientific, and technical services	54	18,994	22,577	27,704
Architectural, engineering, and related services	5413	3,580	3,381	3,386
Computer systems design and related services	5415	(D)	5,169	9,154
Scientific R&D services	5417	10,470	12,892	14,244
Other professional, scientific, and technical services	54 minus (5413, 5415, 5417)	(D)	1,135	920
Management of companies and enterprises	55	(D)	49	381
Health care services	621-23	642	536	1,149
Other nonmanufacturing	56, 61, 624, 71, 72, 81	(D)	731	1,259

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Industry and size of company		1999 ¹	2000	2001 ²
		Millions of dollars		
Distribution by size of company [Number of employees]				
Total		182,711	199,539	198,505
5 to 24		7,004	6,862	4,828
25 to 49		4,750	5,008	3,750
50 to 99		7,225	7,259	8,202
100 to 249		7,213	9,020	12,916
250 to 499		7,892	7,479	8,702
500 to 999		7,032	9,074	10,564
1,000 to 4,999		24,840	30,636	26,748
5,000 to 9,999		16,376	16,768	17,487
10,000 to 24,999		24,922	28,653	27,065
25,000 or more		75,457	78,779	78,244

¹ Some statistics for 1999 have been revised since originally published.

² Beginning with 2001, statistics for total and Federally funded industrial R&D exclude data for Federally Funded Research and Development Centers (FFRDCs).

KEY: (D) = Data have been withheld to avoid disclosing operations of individual companies.
(S) = Indicates imputation of more than 50 percent.
(--) = Indicates data not collected.

NOTES: The R&D in this table is the industrial R&D performed within company facilities funded from all sources. The funds are the company's own; funds from outside organizations such as other companies, research institutions, universities and colleges, nonprofit organizations, and State governments; and funds from the Federal Government. Excluded from this table are R&D not performed within the company (e.g., R&D contracted out to other organizations) and R&D not performed within the 50 U.S. states or D.C. (e.g., R&D not performed on U.S. soil by foreign subsidiaries or other foreign organizations).

For 1999, 2000, and 2001, the frame from which the statistical samples were selected was divided into two partitions based on total company employment. In the manufacturing sector, companies with employment of 50 or more were included in the large company partition. In the nonmanufacturing sector, companies with employment of 15 or more were included in the large company partition. Companies in the respective sectors with employment below these values, but with at least 5 employees, were included in the small company partition. The purpose of partitioning the sample this way was to reduce the variability in industry estimates largely attributed to the random year-to-year selection of small companies by industry and the high sampling weights that sometimes were assigned to them. Because of this, in prior reports detailed industry statistics were published only from the large company partition; detailed industry statistics from the small company partition were not. Statistics from the small company partition were included in the manufacturing, nonmanufacturing, and all industries totals, but were aggregated into "small manufacturing" and "small nonmanufacturing" classifications instead of being included in their respective industry classifications. For this report, this practice was evaluated and discontinued because it was determined that the data for small companies are more useful if they are included in their respective industries even given the sampling concerns described above. Consequently, the "small manufacturing" and "small nonmanufacturing" stublines are no longer present. For 1999 and 2000, statistics previously published for the firms in the small company classifications are not shown separately in this table, but are included in the manufacturing, nonmanufacturing, and all industries totals. For more information, see the technical notes in Survey of Industrial Research and Development Methodology: 2001 at <http://www.nsf.gov/sbe/srs/sird/start.htm>

SOURCE: National Science Foundation/Division of Science Resources Statistics, Survey of Industrial Research and Development: 2001